

REMARKS

In the Office Action dated September 7, 2005, claims 1-20 were presented for examination. Claims 14-17 were rejected under 35 U.S.C. §101. Claim 1-7, 14-17, and 18-20 were rejected under 35 U.S.C. §112, second paragraph. Claims 1, 7, 8, and 14-17 were rejected under 35 U.S.C. §102(b) as being anticipated by *Kitamura et al.*, U.S. Patent No. 6,816,948. Claims 2, 9, and 18-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kitamura et al.* in view of *Imamura*, U.S. Patent No. 6,453,369, and further in view of *Milner*, U.S. Patent Publication No. 2002/0166002. Claims 3-5 and 10-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kitamura et al.* in view of *Imamura*. Claims 6 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kitamura et al.* in view of *Imamura*, and further in view of *Forman et al.*, U.S. Patent No. 5,544,353.

The following remarks are provided in support of the pending claims and responsive to the Office Action of September 7, 2005 for the pending application.

I. Examiner Interview

On December 5, 2005, Examiner Dinh, Examiner Scuderi, and Applicant's Attorney met for an Examiner's Interview. During the interview, the pending claims were discussed together with the art cited by the Examiner in the First Office Action. More specifically, the discussion included the difference between a node identifier, as claimed by Applicants, and a port identifier of *Kitamura et al.* In addition, the security aspect of Applicant's invention was discussed, specifically, the utilization of the hard attribute as a security identifier. Although an agreement was not reached, it was suggested by the Examiners that an amendment to claim 1 to include the limitations of the hard attribute, as provided in dependent claim 2, may place the case in condition for allowance.

II. Rejection Under 35 U.S.C. §101

In the Office Action dated September 7, 2005, the Examiner assigned to the application rejected claims 14-17 under 35 U.S.C. §101. More specifically, the Examiner suggested

removed the limitation "signal-bearing" from claim 14 and the limitation "modulated carrier signal" from claim 15. Applicants have amended claims 14 and 15 to comply with the Examiner's request. Accordingly, Applicants hereby request removal of the rejection under 35 U.S.C. §101.

III. Rejection Under 35 U.S.C. §112, second paragraph

In the Office Action dated September 7, 2005, the Examiner assigned to the application rejected claims 1-7, 14-17, and 18-20 under 35 U.S.C. 112, second paragraph. More specifically, the Examiner raised a concern with the language "said establishing access rights being responsive to a hard attribute" in claims 1 and 18. Applicants have amended claims 1 and 18 to clarify the concerns raised by the Examiner. Furthermore, the Examiner raised a concern with the language "determining a node's responsibility" in claim 18. Again, Applicants have amended this language in claim 18 to clarify the concern raised by the Examiner. Accordingly, in view of the amendments to claims 1, 14, and 18, Applicants respectfully request the Examiner to remove the rejection under 35 U.S.C. §112, second paragraph.

IV. Rejection Under 35 U.S.C. §102(b)

In the Office Action of September 7, 2005, the Examiner assigned to the application rejected claims 1, 7-8, and 14-17 under 35 U.S.C. §102(b) as being anticipated by *Kitamura et al.* ('948). The *Kitamura et al.* patent ('948) relates to a computer system with a plurality of hosts, wherein each host includes a port to facilitate communication with storage media, specifically, a Storage Area Network. An access list containing a list of logical block addresses in conjunction with port identifiers assigned to each block is maintained. A host requesting access to a logical block address must present their port identifier to determine if it matches with the port identifier assigned to the logical block address in the access list.

Applicant's apparatus and method for restricting access to storage media differs from that disclosed in *Kitamura et al.* More specifically, Applicants restrict access to storage media based on a hard attribute, which may include a vendor number, product number, and/or serial number of the storage media. Applicants have amended independent claims 1, 8, and 14 to further define

this limitation. A hard attribute, as defined by Applicants, pertains to a label assigned to the storage media. The identifying field of *Kitamura et al.* is based upon the port identifier. "A port can be an entrance to or exit from a storage network. It can be a connection point for a peripheral device or an application program."¹ A port identifier is "a unique 24 bit address used for frame routing and assigned to a port."² As shown, a port identifier is not associated with a label of the storage media, and more specifically, a hardware attribute as defined by the storage media label. However, based upon the definitions provided in Exhibits A and B, it is clear that a port identifier is different and distinguishable from a storage media label and an associated hardware attribute, as defined in Applicant's amended claims 1, 8, and 14.

There is no teaching in *Kitamura et al.* for utilizing a hardware attribute of storage media in the form claimed by Applicants to control shared access to storage media. In order for the claimed invention to be anticipated under 35 U.S.C. §102(b), the prior art must teach all claimed limitations presented by the claimed invention. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP §2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F. 2d 628, 631, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987)). *Kitamura et al.* does not anticipate the invention of Applicants based upon the legal definition of anticipation. Specifically, *Kitamura et al.* does not show leveraging the hardware identifier as claimed by Applicants to determine access rights of a node to the storage media. Similarly, *Kitamura et al.* does not show node ownership. Accordingly, *Kitamura et al.* clearly fails to teach the limitations pertaining to the method, apparatus, and article for controlling access to storage media by two or more nodes in a computing environment as presented in Applicant's pending claims 1, 7-8, and 14-17.

V. Rejection of Claims 2, 9, and 18-20 under 35 U.S.C. §103(a)

In the Office Action dated September 7, 2005, the Examiner assigned to the application

¹STORAGE NETWORKING INDUSTRY ASSOCIATION, Dictionary P, pages 1 and 8, attached as Exhibit A.

²STORAGE NETWORKING INDUSTRY ASSOCIATION, Dictionary P, pages 1 and 9, attached as Exhibit B.

rejected claims 2, 9, and 18-20 under 35 U.S.C. §103(a) as being unpatentable over *Kitamura et al.*, U.S. Patent No. 6,816,948, in view of *Imamura et al.*, U.S. Patent No. 6,453,369, and further in view of *Milner et al.*, U.S. Patent Publication No. 2002/0166002.

The comments presented above with respect to *Kitamura et al.* are hereby incorporated by reference.

The *Imamura et al.* patent ('369) pertains to controlling access to memory. More specifically, the invention concerns comparing a disk identifier with a memory identifier. "The device identifier recorded on the medium is compared with the device identifier of the storage device 1 in which the medium is currently loaded in order to determine whether the two device identifiers match." Col. 6, lines 8-11. Although *Imamura et al.* does teach that the identifier may be a serial number inherent to the disk device, see Col. 5, lines 8-10, Applicant's invention differs from that of *Imamura et al.* Applicants are establishing access rights of one or more nodes to storage media, whereas, *Imamura et al.* determines access rights between a memory medium and storage media. The act of determining access rights between a node and storage media and a memory medium and storage media are two independent acts that are not necessarily analogous.

The *Milner et al.* patent publication ('002) pertains to identifying a device associated with an I/O path. More specifically, the alleged invention concerns identifying a device associated with an I/O path, and determining whether this device is the type of device defined by a property file of the device, wherein a property file identifies or discovers devices disposed within a SAN. Although *Milner et al.* does teach that the identifier may be a vendor identifier, a product identifier, or a serial number of a SCSI device, Applicant's invention differs from that of *Milner et al.* Applicants are establishing access rights of one or more nodes to storage media, whereas, *Milner et al.* identifies a device associated with an I/O path. The act of determining access rights between a node and storage media and identifying a device associated with an I/O path are two independent acts that are not necessarily analogous.

Applicants do acknowledge that both *Imamura et al.* and *Milner et al.* teaches the use of an identifier or a group of identifiers in a computing environment, but assert that these prior art identifiers are for a different purpose than that claimed by Applicants, and are therefore non-analogous. "When determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *In re Rouffet*, 149 F.3d 1350, 47 USPQ 2d 1453 (Fed. Cir. 1998) citing *In re Beattie*, 974 F.2d 1309, 24 USPQ 2d 1040 (Fed. Cir. 1992). The Examiner has failed to demonstrate how the *Kitamura et al.* and *Imamura et al.* patents and publication, respectively, teach or suggests use of the identifiers of *Milner et al.* for determining access rights of a node to storage media. "The Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." *Id.* There is no basis for motivation of the substitution of the identifiers outside Applicant's claimed invention. "Rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an 'illogical and inappropriate process by which to determine patentability.' " *In re Rouffet* citing *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996). Clearly by combining three prior patents, the Examiner is dissecting the elements of Applicant's claims and joining them in a way not previously envisioned. Accordingly, Applicants respectfully request that the Examiner remove the rejection of claims 2, 9, and 18-20.

VI. Rejection of Claims 3-5 and 10-12 under 35 U.S.C. §103(a)

In the Office Action dated September 7, 2005, the Examiner assigned to the application rejected claims 3-5 and 10-12 under 35 U.S.C. §103(a) as being unpatentable over *Kitamura et al.*, U.S. Patent No. 6,816,948, in view of *Imamura et al.*, U.S. Patent No. 6,645,369.

The comments presented above with respect to *Kitamura et al.* and *Imamura et al.* are hereby incorporated by reference.

As noted above, *Kitamura et al.* utilizes a port identifier of a host in conjunction with a table that identifies specific port identifiers with blocks of memory. A port, which may be in communication with a node, is not a node. Applicants are claiming the elements of a node ownership and cluster ownership. As shown in the Specification, node ownership and cluster ownership may be based upon a node identifier and a cluster identifier, respectively. A node identifier is a bit identifier associated with an addressable entity connected to an I/O bus or network.³ Similarly, a cluster identifier is a bit identifier associated with "a collection of computers that are interconnected (typically at high-speeds) for the purpose of improving reliability, availability, serviceability and/or performance (via load balancing)."⁴ Neither a means for identifying a node, such as a node identifier, nor a means for identifying a cluster, such as a cluster identifier, are provided in *Kitamura et al.*

There is no teaching in *Kitamura et al.* for either a node identifier or a cluster identifier to determine access rights of a node to storage media. The identifier of *Kitamura et al.* is limited to a port identifier. "To establish a prima facie case of obviousness . . . the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." MPEP §2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Accordingly, *Kitamura et al.* does not teach or suggest the making of Applicant's node and/or cluster identifier as claimed.

With respect to *Imamura et al.*, this invention pertains to comparing a disk identifier with a memory identifier. Again, a disk identifier and a memory identifier are not equivalent or substitutable for a node and/or cluster identifier and do not determine access rights of a node to storage media. It is not clear to Applicants how *Kitamura et al.* and *Imamura et al.* may be considered analogous art and combinable with Applicant's claimed invention. "When

³STORAGE NETWORKING INDUSTRY ASSOCIATION, Dictionary N, pages 1 and 5, attached as Exhibit C.

⁴STORAGE NETWORKING INDUSTRY ASSOCIATION, Dictionary C, pages 1 and 7, attached as Exhibit D.

determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.” *In re Rouffet*, 149 F.3d 1350, 47 USPQ 2d 1453 (Fed. Cir. 1998) citing *In re Beattie*, 974 F.2d 1309, 24 USPQ 2d 1040 (Fed. Cir. 1992). The Examiner has failed to demonstrate how the *Kitamura et al.* and *Imamura et al.* patents may be combined to teach or suggests use of the identifiers as claimed by Applicants for determining access rights of a node to storage media. “The Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.” *Id.* There is no basis for motivation of the substitution of the identifiers outside Applicant’s claimed invention. “Rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an ‘illogical and inappropriate process by which to determine patentability.’ ” *In re Rouffet* citing *Sensonic, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996). Accordingly, Applicants respectfully request that the Examiner remove the rejection of claims 3-5 and 10-12.

VII. Rejection of Claims 6 and 13 under 35 U.S.C. §103(a)

In the Office Action dated September 7, 2005, the Examiner assigned to the application rejected claims 6 and 13 under 35 U.S.C. §103(a) as being unpatentable over *Kitamura et al.*, U.S. Patent No. 6,816,948, in view of *Imamura et al.*, U.S. Patent No. 6,645,369, and further in view of *Forman et al.*, U.S. Patent No. 5,544,353.

The comments presented above with respect to *Kitamura et al.* and *Imamura et al.* are hereby incorporated by reference.

The *Forman et al.* patent (‘353) relates to access and control of a shared resource in a distributed computing environment. Control of the shared resource is maintained through a

control file and an associated timestamp. However, the *Forman et al.* patent pertains specifically to controlling access to a shared resource within storage media. There is no teaching, suggestion, or motivation within *Forman et al.* to utilize the "timestamp" to determine access rights of a node to storage media. In fact, *Forman et al.* specifically relates to read and/or write access of a program to a shared resource. See Col. 4, lines 15-32. It is not clear to Applicants how *Kitamura et al.*, *Imamura et al.*, and *Forman et al.* may be considered analogous art and combinable with Applicant's claimed invention. "When determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *In re Rouffet*, 149 F.3d 1350, 47 USPQ 2d 1453 (Fed. Cir. 1998) citing *In re Beattie*, 974 F.2d 1309, 24 USPQ 2d 1040 (Fed. Cir. 1992). The Examiner has failed to demonstrate how the *Kitamura et al.*, *Imamura et al.*, and *Forman et al.* patents teach or suggest use of the activity interval and counter fields as claimed by Applicants for determining access rights of a node to storage media. *Forman et al.* does not teach, suggest, or motivate how the "timestamp" may be extrapolated for use in determining access rights of a node to storage media. In addition, as noted above, *Imamura et al.* also does not relate to determining access rights of a node to storage media. "The Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." *Id.* There is no basis or motivation for the substitution of the identifiers outside Applicant's claimed invention. "Rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an 'illogical and inappropriate process by which to determine patentability.'" *In re Rouffet* citing *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996). Accordingly, Applicants respectfully request that the Examiner remove the rejection of claims 6 and 13.

Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. Accordingly,

Applicants request that the Examiner indicate allowability of claims 1-20, and that the application pass to issue. If the Examiner believes, for any reason, that personal communication will expedite prosecution of the application, the Examiner is hereby invited to telephone the undersigned at the number provided.

For the reasons outlined above, withdrawal of the rejection of record and an allowance of this application are respectfully requested.

Respectfully submitted,

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Date: December 7, 2005